

## Abstract of Disclosure

[0084] A network access system designed to provide efficient access to nodes using a communication channel based on the needs of the system. This invention provides a specific design for token based access scheme which allows access based on priority, time, and data requirements. Also included is a unique collision detection and token granting mechanism. These designs provide for nodes to efficiently request and gain access to network bandwidth and are adaptive to allow for different data types such as voice, video, control, and data over networks such as power line or wireless.